

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A heating system, comprising:
a collapsible shroud defining an inner volume when in an open position and comprising a heat resistant material; and
a plurality of tube-shaped electrical infrared heating elements oriented generally downward or lateral facing in a generally horizontal plane and positioned within the inner volume of the shroud, wherein the infrared heating elements provide substantially solely infrared heat and substantially no visible light;
a plurality of reflectors, each reflector being associated with a separate heating element and being positioned between all portions of the heating element exposed to the shroud and the shroud to direct the infrared heat away from the shroud, the reflectors being spaced apart from the shroud with an air insulative space there between.
2. (original) The system of claim 1, wherein the shroud includes a plurality of radially extending supports and the heating elements are mounted on exterior surfaces of the radially extending supports.
3. (canceled)
4. (original) The system of claim 1, wherein the infrared heating elements each include an electric filament enclosed in a quartz glass housing.
5. (canceled)
6. (original) The system of claim 1, wherein the shroud includes refractive material.

7. (original) The system of claim 1, further comprising at least one heat sensor configured to monitor temperatures of objects heated by the heating elements.

8. (original) The system of claim 1, wherein the heating elements provide infrared waves having a wavelength between about 1 μm to about 20 μm .

9. (currently amended) A patio umbrella heating system, comprising:
a patio umbrella including:
a stand member;
radially extending a plurality of webbing supports extending in a generally radial direction from the stand member; and
webbing extending between the webbing supports; and
a plurality of intermediate supports extending between the stand member and the webbing supports; and
[[a]] at least one heating element providing substantially solely infrared heat, the heating element and being mounted to at least one of the intermediate supports.

10. (currently amended) The system of claim 9, further comprising two or more heating elements, wherein each heating element ~~being~~ is mounted to a separate intermediate support.

11. (canceled)

12. (currently amended) The system of claim 9, ~~further comprises a center support wherein the stand member is~~ secured to the umbrella at a central portion of the umbrella and extending extends downward from the umbrella.

13. (currently amended) The system of claim 9, ~~further comprising an umbrella support wherein the stand member is~~ secured to the umbrella at a central portion of the umbrella and extending extends upward from the umbrella.

14. (currently amended) The system of claim 9, wherein the ~~radially extending~~ webbing supports are curved so as to form a downward facing concave shape

15. (currently amended) The system of claim 9, wherein the ~~radially extending~~ webbing supports are straight and ~~are sloped~~ and extend at angle less than 90 degrees relative to an axis of the stand member from a central point of the umbrella downward relative to a horizontal plane so as to form a conical shape.

16. (original) The system of claim 11, further comprising controls for controlling functions of the heating element.

17. (original) The system of claim 16, wherein the controls are mounted to the support pole.

18. (original) The system of claim 9, wherein the umbrella is adjustable between an open position and a closed position.

19. (original) The system of claim 9, wherein the heating element is substantially downward facing.

20. (currently amended) The system of claim 9, further comprising at least two heating elements, wherein at least one of the heating element elements is radially inward facing in a direction substantially perpendicular to an axis of the stand member.

21. (original) The system of claim 9, wherein the heating elements are electronic.

22. (original) The system of claim 9, wherein the heating elements generate heat using combustion.

23. (original) The system of claim 9, further comprising a proximity sensor that generates an on/off signal for the heating elements in response to an object being positioned near the patio umbrella.

24. (original) The system of claim 9, further comprising an heating element switch that is operable to automatically turn the heating element off when the umbrella is adjusted from an open position to a closed position.

25. (currently amended) A heating system, comprising:

a stand member;

a plurality of ~~radially-extending~~ webbing support members extending generally radially from the stand member;

webbing extending between the ~~radially-extending~~ webbing support members;

a plurality of intermediate support members coupled between the radially extending support members and the stand member; and

an infrared heating element secured to an outer surface of at least one of the ~~radially-extending supports~~ intermediate support members, the infrared heating element providing substantially solely infrared heat.

26. (canceled)

27. (original) The system of claim 25, wherein the infrared heating element is oriented in a generally downward facing direction.

28. (original) The system of claim 25, wherein the infrared heating element is powered by electricity.

29. (original) The system of claim 25, further comprising a reflector positioned adjacent to an upward facing side of the infrared heating element to reflect downward the infrared waves produced by the infrared heating element.

30. (original) The system of claim 29, wherein the reflector comprises sheet metal.

31. (original) The system of claim 29, wherein the reflector comprises a ceramic fiber and a binder.

32. (original) The system of claim 29, wherein the infrared heating element is a ceramic infrared emitter.

33. (original) The system of claim 29, wherein the infrared heating element is a metal infrared emitter.

34. (original) The system of claim 29, wherein the infrared heating element is a quartz glass infrared emitter.

35. (original) The system of claim 29, wherein the infrared heating element is selected from a group consisting of a tube, a panel and an Edison bulb type infrared emitter.

36. (currently amended) A method of heating objects in proximity to a patio umbrella using an infrared heating element, the umbrella including a shroud, a plurality of elongate support ribs extending from a center of the shroud towards outer edges of the shroud, and a stand member, the method comprising the steps of:

opening the umbrella;

supporting the infrared heating element with the support ribs within an umbrella enclosure defined by the opened umbrella;

orienting the infrared heating ~~elements~~ element in a generally downward direction;

positioning the infrared heating elements at a location within the umbrella enclosure spaced apart from the shroud with an air insulative spacing there between; and

directing substantially solely infrared waves and substantially no light from the infrared heating element to the objects ~~substantially~~ without heating air positioned between the objects and the infrared heating element.

37. (currently amended) A heated patio furniture set, comprising:
a table;
at least one chair; and
an umbrella comprising:
a plurality of radially extending support members;

webbing extending between the radially extending support members; and
an infrared heating element secured to an outer surface of at least one of
the radially extending supports in a generally downward facing direction to direct
infrared waves toward the table and chairs, the infrared heating element being configured
to produce substantially solely waves having wavelengths that are absorbed by solid
structures and not by air; and

a heat sensor mounted to the table or to the chair, the heat sensor being configured
to determine an amount of heat generated in the table or chair to which the heat sensor is
mounted, the heat being generated by the directed infrared waves.

38. (canceled)

39. (original) The furniture set of claim 37, wherein the umbrella is supported in
an upright position with the table.

40. (currently amended) The furniture set of claim ~~[[38]]~~ 38, wherein the furniture
comprises a material that absorbs at least some of the infrared waves and is heated.